CLAIMS:

1. An assay method for an agent which affects Importin α acetylation, the method including:

(a) treating an acetylated Importin α polypeptide or peptide with a test compound, or

(b) treating with a test compound an Importin α polypeptide or peptide which comprises one or more lysine residues corresponding to those found at positions Lys 18, Lys 20 and Lys 22 in wild-type Importin α Rch1, in which polypeptide or peptide one or more of said lysines is not acetylated, or

(c) bringing into contact a substance which includes a CBP polypeptide which acetylates Importin α, a substance which includes an Importin α polypeptide or peptide including a site acetylated by CBP, and a test compound;

and

(d) determining acetylation of the Importin α polypeptide or peptide.

2. An assay method for an agent which affects Importin α activity, the method including:

(a) bringing into contact Importin α and a test compound; and

(b) determining Importin α activity in the presence and

absence of a CBP polypeptide which acetylates Importin α.

3. A method according to claim 2 comprising determining ability of Importin α to bind to Importin β, to translocate into the nucleus and/or import a cargo protein.

4. An assay method for an agent which modulates interaction between CBP and Importin α, the method including:

(a) bringing into contact a first substance including a CBP polypeptide or peptide, a second substance including an Importin α polypeptide or peptide, and a test compound under conditions in which, in the absence of the test compound being an inhibitor, the first and second substances interact; and

(b) determining interaction between the first and second substances.

5. An assay method for an agent which affects ability of Importin α to (i) bind Importin β, (ii) translocate into the nucleus, and/or (iii) import a cargo protein, the method comprising:

(a) bringing into contact CBP and a test compound, and

(b) determining CBP acetyltransferase activity;

wherein a test compound which inhibits CBP acetyltransferase activity is identified as a candidate said agent.

6. A method according to claim 5 comprising determining acetylation of Importin α by CBP.

7. A method according to claim 5 comprising determining Importin α activity.

8. A method according to any one of claims 5 to 7 wherein a test compound which inhibits CBP acetyltransferase activity is further tested for ability to affect ability of Importin α to (i) bind Importin β, (ii) translocate into the nucleus, and/or (iii) import a cargo protein.

9. An assay method for an agent which interacts with a region of CBP or a region Importin α, which region of CBP interacts with Importin α and which region of Importin α interacts with CBP, a said agent which interacts with a said region being a candidate modulator of interaction between CBP and Importin α, the method including:

(a) bringing into contact a substance which includes a CBP peptide which interacts with Importin α, or which includes an Importin α peptide which interacts with CBP, and a test compound; and

(b) determining interaction between said substance and the test compound.

10. A method according to any one of claims 1 to 9 further comprising formulating a said agent into a composition comprising at least one additional component.

11. A method according to claim 10 where the composition includes a pharmaceutically acceptable excipient.

12. A method according to any one of claims 1 to 11 further comprising providing a said agent, or, where said agent is peptidyl, nucleic acid encoding a said agent, to cells to modulate one or more of ability of Importin α to (i) bind Importin β, (ii) translocate into the nucleus, and/or (iii) import a cargo protein.

13. A method according to claim 12 wherein said agent or nucleic acid is provided to cells *in vitro*.

14. A method according to any one of claims 1 to 9 further comprising use of a said agent, or, where said agent is peptidyl, nucleic acid encoding a said agent, in the manufacture of a medicament for treating a disorder of Importin α activity.

15. A peptide fragment of Importin α or of CBP, which peptide is about 40 amino acids or less, and which modulates

interaction between Importin α and CBP.

16. A peptide according to claim 15 which is an Importin α peptide comprising one or more lysine residues corresponding to those found at positions Lys 18, Lys 20 and Lys 22 in wild-type Importin α.

17. A peptide according to claim 15 or claim 16 which is about 20 amino acids in length.

18. An isolated nucleic acid encoding a peptide according to any one of claims 15 to 17.

19. A peptide according to any of claims 15 to 17 or nucleic acid according to claim 18 for use in a method of treatment of a disorder of Importin α activity in a human or animal body.

20. Use of a peptide according to any of claims 15 to 17 or nucleic acid according to claim 18 in the manufacture of a medicament for treatment of a disorder of Importin α activity in a human or animal body.

21. An agent obtained by a method according to any one of claims 1 to 9.

22. An agent according to claim 21, or, where the agent is peptidyl, nucleic acid encoding the agent, for use in a method of treatment of a disorder of Importin α activity in a human or animal body.

23. Use of an agent according to claim 21, or, where the agent is peptidyl, nucleic acid encoding the agent, in the manufacture of a medicament for treatment of a disorder of Importin α activity in a human or animal body.